#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**Applicants:** Hideaki Nobusawa, et al. **Examiner:** James D. Ewart

**Serial No.:** 10/697,755 **Art Unit:** 2617

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For: MOBILE TELEPHONE WITH REMOTE-CONTROLLING CAPABILITY.

REMOTE-CONTROLLING METHOD AND SYSTEM THEREFOR

Confirmation No.: 8759 Dated: February 22, 2011

Commissioner for Patents

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# APPEAL BRIEF

Sir:

Pursuant to 35 U.S.C. § 134 and 37 C.F.R. § 41.37, entry of this Appeal Brief in support of the Notice of Appeal filed December 22, 2010 in the above-identified matter is respectfully requested. This paper is submitted as a brief setting forth the authorities and arguments upon which Appellants rely in support of the appeal from the Final Rejection of Claims 16-40 in the above-identified patent application on June 22, 2010.

# CERTIFICATE OF ELECTRONIC FILING

I hereby certify that this correspondence is being deposited with the United States Patent & Trademark Office via Electronic Filing through the United States Patent and Trademark Office e-business website, on February 22, 2011.

### I. REAL PARTY OF INTEREST

The real party of interest in the above-identified patent application is NEC Corporation.

### II. RELATED APPEALS AND INTERFERENCE

There are no pending appeals or interferences related to this application to Appellants' knowledge.

### III. STATUS OF CLAIMS

Claim 16 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman et al. U.S. Patent No. 6,223,029 (hereinafter "Stenman) in view of Shim U.S. Patent No. 6,078,270 (hereinafter "Shim").

Claim 17 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman, Shim in view of August et al. U.S. Patent No. 5,671,267 (hereinafter "August").

Claim 18 is rejected under 35 U.S.C. § 103(a) as being unpatentable over

Stenman, Shim, in view of Wall et al., U.S. Patent Pub No. 2003/0156053 (hereinafter "Wall").

Claim 19 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman and Shim.

Claim 20 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman, Shim and August.

Claim 21 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman, Shim and Wall.

Claim 22 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman and Shim.

Claim 23 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman, Shim and August.

Claim 24 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman, Shim and August.

Claim 25 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman, Shim and Wall.

Claim 26 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman and Shim.

Claim 27 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman, Shim and August.

Claim 28 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman, Shim and Wall.

Claim 29 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman and Shim.

Claim 30 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman, Shim and August.

Claim 31 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman, Shim and Wall.

Claim 32 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman and Shim.

Claim 33 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman, Shim and August.

Claim 34 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman, Shim and August.

Claim 35 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman, Shim and Wall.

Claim 36 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman and Shim.

Claim 37 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman and Shim.

Claim 38 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman and Shim.

Claim 39 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman, Shim and Wall.

Claim 40 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Stenman, Shim and Wall.

### IV. STATUS OF AMENDMENTS

The claims were not amended in the Response to the Final Rejection filed September 20, 2010 and current claims reflect the amendment filed on March 23, 2010. Claims 16-40 are pending.

### V. SUMMARY OF CLAIMED SUBJECT MATTER

Claims 16-40 are the claims on appeal. A copy of the rejected claims is attached hereto in the Claims Appendix.

The invention with respect to claim 16 is directed a mobile telephone (Figures 1-3, element 30 and detailed description) with remote-controlling capability which remote-controls target equipment (Figure 1, element 50 or 60), comprising:

storage means (Figure 2, element 37) for storing a group of remote control codes for only one predetermined controlling operation to be performed on the target equipment (element 50 or 60, page 24, line 27-page 25, line 3, page 25, line 16-page 27 line 5, page 28 lines 6-9); and

transmission means (Figure 2, element 36, page 38, lines 10-15) for transmitting to the target equipment (element 50 or 60) the group of remote control codes as a batch for the only one predetermined controlling operation to be performed on the target equipment (element 50 or 60) in response to a user operation (page 25, line 10-page 27, line 5, page 27, lines 12-23, page 30, lines 21-page 32, lines 7, page 32, line 27-page 36, line 26).

The invention with respect to claim 19 is directed to a mobile telephone with remote-controlling capability (Figures 1-3, element 30) which remote-controls target equipment (element 50 or 60), comprising:

an operation unit (Figure 2, element 35) having a plurality of operation buttons (Figure 3, page 16, lines 13-17);

storage means (Figure 2, element 37) for storing various remote control codes associated with the plurality of operation buttons in a one-to-one relationship for various controlling operations on the target equipment (element 50 or 60) and a part of remote control codes of a group of remote control codes for only one predetermined controlling operation on the target equipment (page 16, lines 18-26, page 17, lines 9-15, page 26, lines 17-page 27, line 5, page 32, lines 27-page 36, line 26);

a code definition unit(element 1310, 1320, page 22, bottom line) including a number of codes (element 1310, 1320, page 23, line 1) showing at least whether the remote control codes are predetermined and fixed or variable and assigned by a user (page 28, lines 2-7); and

transmission means (Figure 2, element 36, page 38, lines 10-15) for transmitting to the target equipment the group of remote control codes as a batch for only one predetermined controlling operation, formed by a remote control code associated with an operation button pressed by a user in advance and the part of remote control codes to perform the only one predetermined controlling operation on the target equipment in response to a user operation (page 26, lines 17-page 27, line 5, page 32, lines 27-page 36, line 26).

The invention with respect to claim 22 is directed to a mobile telephone with remote-controlling capability (Figures 1-3, element 30) which remote-controls target equipment (Figure 1, elements 50 and 60), comprising:

an operation unit (Figure 2, element 35) having a plurality of operation buttons (Figure 3, page 16, lines 13-17);

storage means (Figure 2, element 37) for storing various remote control codes associated with the plurality of operation buttons in a one-to-one relationship for various controlling operations on the target equipment (element 50 or 60, page 16, lines 18-26, page 17, lines 9-15), a first group of remote control codes for only one predetermined first controlling operation on the target equipment (page 25, line 16-page 26, lines 7), and a part of remote control codes of a second group of remote control codes for only one predetermined second controlling operation on the target equipment (page 26, lines 18-page 27, line 5, page 27, line 24-page 28, line 9);

a code definition unit (element 1310, 1320, page 22, bottom line) including number of codes (element 1310, 1320, page 23, line 1) showing at least whether the remote control codes are predetermined and fixed or variable and assigned by a user (page 28, lines 2-7); and

transmission means (Figure 2, element 36, page 38, lines 10-15) for transmitting to the target equipment a remote control code associated with one button of the plurality of operation buttons when the one button is pressed and when the mobile telephone is set in a first remote control mode (page 29, line 17-page 30, line 11), transmitting to the target equipment the first group of remote control codes as a first batch in response to a user operation when the mobile telephone is set in a second remote control mode (page 25, line 16-page 26, line 2, page 30, line 12-page 32, line 17), and transmitting to the target equipment the second group of remote control codes formed as a second batch formed by a remote control code associated with an operation button pressed by a user in advance and the part of remote control codes in response to a user operation when the mobile telephone is set in third remote control mode (page 26, lines 18-24, page 32, line 27-page 36, line 27).

The invention with respect to claim 26 is directed to a remote-controlling method for a mobile telephone with remote-controlling capability (Figures 1-3, element 30) which remote-controls target equipment (Figure 1, element 50 and 60), and has storage means (Figure 2, element 37) for storing a group of remote control codes for only one predetermined controlling operation on the target equipment (page 27 line 24-page 28, line 9), comprising:

a transmitting step of transmitting to the target equipment (element 50 or 60) the group of remote control codes as a batch for only one predetermined controlling operation stored

in the storage means in response to a user operation (page 25, line 10-page 27, line 5, page 27, lines 12-23, page 30, line 21-page 32, line 7, page 32, line 27-page 36, line 26).

The invention with respect to claim 29 is directed to a remote-controlling method for a mobile telephone with remote-controlling capability (Figures 1-3, element 30) which remote-controls target equipment (Figure 1, element 50 and 60), and has an operation unit (Figure 2, element 35) and storage means (Figure 2, element 37) for storing various remote control codes associated with a plurality of operation buttons of the operation unit in a one-toone relationship for various controlling operations on the target equipment, and a part of remote control codes of a group of remote control codes for only one predetermined controlling operation on the target equipment (page 16, lines 18-26, page 17, lines 9-15, page 26, lines 17page 27, line 5, page 32, line 27-page 36, line 26), comprising a step of determining whether the remote control codes are predetermined and fixed or variable and assigned by a user (page 28, lines 2-7) according to number of codes (element 1310, 1320, page 23, line 1) in a code definition unit (element 1310, 1320, page 22, bottom line); a step of transmitting to the target equipment the group of remote control codes as a batch for only one predetermined controlling operation, formed by the part of remote control codes stored in the storage means and a remote control code associated with an operation button pressed by a user in advance to perform the only one predetermined controlling operation on the target equipment in response to a user operation (page 26, line 17-page 27, line 5, page 32, line 27-page 36, line 26).

The invention with respect to claim 32 is directed to a remote-controlling method for a mobile telephone with remote-controlling capability (Figures 1-3, element 30) which remote-controls target equipment (Figure 1, element 50 and 60), and has an operation unit (Figure 2, element 35) and storage means (Figure 2, element 37) for storing various remote

control codes associated with a plurality of operation buttons of the operation unit in a one-toone relationship for various controlling operations on the target equipment (element 50 or 60,
page 16, lines 18-26, page 17, lines 9-15), a first group of remote control codes for only one
predetermined first controlling operation on the target equipment (page 25, line 16-page 26, line
7), and a part of remote control codes of a second group of remote control codes for only one
predetermined second controlling operation on the target equipment (page 26, lines 18-page 27,
line 5, page 27, line 24-page 28, line 9), comprising the steps of:

transmitting to the target equipment (elements 50 or 60) a remote control code associated with one button of the plurality of operation buttons when the one button is pressed and when the mobile telephone is set in a first remote control mode (page 29, line 17-page 30, line 11);

transmitting to the target equipment (elements 50 or 60) the first group of remote control codes as a first batch for only one predetermined first controlling operation in response to a user operation when the mobile telephone (Figure 1, element 30) is set in a second remote control mode (page 25, line 16-page 26, lines 2, page 30, line 12-page 32, lines 17); and

determining whether the remote control codes are predetermined and fixed or variable and assigned by the user (page 28, lines 2-7) according to number of codes (element 1310, 1320, page 23, line 1) in a code definition unit (element 1310, 1320, page 22, bottom line) when the mobile telephone is set in a third remote control mode; and

transmitting to the target equipment (elements 50 or 60) the second group of remote control codes as a second batch for only one predetermined second controlling operation, formed by a remote control code associated with an operation button pressed by a user in advance and the part of remote control codes for only one predetermined second controlling

operation in response to a user operation when the mobile telephone (Figure 1, element 30) is set in a third remote control mode (page 26, lines 18-24, page 32, line 27-page 36, line 27).

The invention with respect to claim 36 is directed to a program used to direct a computer (page 38, lines 6-9) to execute a remote-controlling method for a mobile telephone with remote-controlling capability (Figures 1-3, element 30) which remote-controls target equipment (Figure 1, element 50 and 60), and said mobile telephone has storage means (Figure 2, element 37) for storing a group of remote control codes for only one predetermined controlling operation on the target equipment, said remote-controlling method comprising:

a transmitting step of transmitting to the target equipment (Figure 1, element 50 or 60) the group of remote control codes as a batch for only one predetermined controlling operation stored in the storage means (Figure 2, element 37) in response to a user operation (page 25, line 10-page 27, line 5, page 27, lines 12-23, page 30, line 21-page 32, line 7, page 32, line 27-page 36, line 26).

The invention with respect to claim 37 is directed to a program used to direct a computer (page 38, lines 6-9) to execute a remote-controlling method for a mobile telephone with remote-controlling capability (Figures 1-3, element 30) which remote-controls target equipment (Figure 1, element 50 and 60), and said mobile telephone has an operation unit (Figure 2, element 35) and storage means (Figure 2, element 37) for storing various remote control codes associated with a plurality of operation buttons of the operation unit in a one-to-one relationship for various controlling operations on the target equipment, and a part of remote control codes of a group of remote control codes for only one predetermined controlling operation on the target equipment (page 16, lines 18-26, page 17, lines 9-15, page 26, line 17-page 27, line 5, page 32, lines 27-page 36, line 26), said remote-controlling method comprising:

determining whether the remote control codes are predetermined and fixed or variable and assigned by a user (page 28, lines 2-7) according to number of codes (element 1310, 1320, page 23, line 1) in a code definition unit (element 1310, 1320, page 22, bottom line);

a step of transmitting to the target equipment the group of remote control codes as a batch for only one predetermined controlling operation, formed by the part of remote control codes stored in the storage means (Figure 2, element 37) and remote control code associated with an operation button pressed by a user in advance to perform the only one predetermined controlling operation on the target equipment (Figure 1, element 50 or 60) in response to a user operation (page 26, lines 17-page 27, line 5, page 32, line 27-page 36, line 26).

The invention with respect to claim 38 is directed to a program used to direct a computer (page 38, lines 6-9) to execute a remote-controlling method for a mobile telephone with remote-controlling capability (Figures 1-3, element 30) which remote-controls target equipment (Figure 1, element 50 and 60), and said mobile telephone has an operation unit (Figure 2, element 35) and storage means (Figure 2, element 37) for storing various remote control codes associated with a plurality of operation buttons of the operation unit in a one-to-one relationship for various controlling operations on the target equipment (page 16, lines 18-26, page 17, lines 9-15), a first group of remote control codes for only one predetermined first controlling operation on the target equipment (page 25, line 16-page 26, line 7), and a part of remote control codes of a second group of remote control codes for only one predetermined second controlling operation on the target equipment (page 26, line 18-page 27, line 5, page 27, line 24-page 28, line 9), said remote-controlling method comprising the steps of:

transmitting to the target equipment (Figure 1, element 50 or 60) a remote control code associated with one button of the plurality of operation buttons when the one button is

pressed and when the mobile telephone (Figure 1, element 30) is set in a first remote control mode (page 29, line 17-page 30, line 11);

transmitting to the target equipment (Figure 1, element 50 or 60) the first group of remote control codes as a first batch for only one predetermined first controlling operation in response to a user operation when the mobile telephone (Figure 1, element 30) is set in a second remote control mode (page 25, line 16-page 26, lines 2, page 30, line 12-page 32, lines 17);

determining whether the remote control codes are predetermined and fixed or variable and assigned by the user (page 28, lines 2-7) according to number of codes (elements 1310, 1320, page 23, line 1) in a code definition unit (element 1310, 1320, page 22, bottom line) when the mobile telephone is set in a third remote control mode; and

and transmitting to the target equipment (Figure 1, element 50 or 60) the second group of remote control codes as a second batch for only one predetermined second controlling operation, formed by a remote control code associated with an operation button pressed by a user in advance and the part of remote control codes in response to a user operation when the mobile telephone (Figure 1, element 30) is set in a third remote control mode (page 26, lines 18-24, page 32, line 27-page 36, line 27).

The invention with respect to claim 39 is directed to a remote control system, comprising:

a mobile telephone with remote-controlling capability (Figures 1-3, element 30) which has an operation unit (Figure 2, element 25) provided with a plurality of operation buttons (Figure 3), and remote-controls target equipment (Figure 1, element 50 or 60); and

a server (Figure 1, element 40) which is connected to a communications network (Figure 1, element 100), and stores various remote control codes associated with the plurality of

operation buttons in a one-to-one relationship for various controlling operations on the target equipment, a first group of remote control codes for only one predetermined first controlling operation on the target equipment, and a part of remote control codes of a second group of remote control codes for only one predetermined second controlling operation on the target equipment (page 19, lines 13-23, page 23, line 15-page 24, line 2, page 27 line 24-page 28, line 9), wherein

said mobile telephone (Figure 1, element 30) comprises:

storage means (Figure 2, element 37);

download means (Figure 2, elements 31 and 32) for downloading the various remote control codes, the first group of remote control codes, and the part of remote control codes from said server (Figure 1, element 40) through the communications network (Figure 1, element 100), and storing the downloaded codes in said storage means (Figure 2, element 37, page 19, lines 13-23, page 23, line 15-page 24, line 2, page 27 line 24-page 28, line 9); and

transmission means (page 18, lines 9-14, page 23, lines 9-14, page 38, lines 10-15) for transmitting to the target equipment (Figure 1, elements 50 or 60) a remote control code associated with one button of the plurality of operation buttons when the one button is pressed and when the mobile telephone is set in a first remote control mode (page 29, line 17-page 30, line 11), transmitting to the target equipment (Figure 1, elements 50 or 60) the first group of remote control codes as a first batch for only one predetermined first controlling operation in response to a user operation when the mobile telephone is set in a second remote control mode (page 25, line 16-page 26, line 2, page 30, line 12-page 32, lines 17), and transmitting to the target equipment (Figure 1, elements 50 or 60) the second group of remote control codes as a second batch for only one predetermined second controlling operation formed by a remote

control code associated with an operation button pressed by a user in advance and the part of remote control codes in response to a user operation when the mobile telephone is set in a third remote control mode (page 26, lines 18-24, page 32, line 27-page 36, line 27).

#### VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Appellants are appealing the Rejection of Claims 16, 19, 22, 26, 29, 32, and 36-38 under 35 U.S.C. § 103(A), as being unpatentable over Stenman in view of Shim.

Appellants are appealing the Rejection of Claim 17 under 35 U.S.C. § 103(A), as being unpatentable over Stenman in view of Shim in view of August.

Appellants are appealing the Rejection of Claims 18, 21, 25, 28, 31, and 35 under 35 U.S.C. § 103(A), as being unpatentable over Stenman in view of Shim in view of Wall.

Appellants are appealing the Rejection of Claim 20, 23, 24, 27, 30, 33, and 34 under 35 U.S.C. § 103(A), as being unpatentable over Stenman in view of Shim in view of August.

Appellants are appealing the Rejection of Claim 39 under 35 U.S.C. § 103(A), as being unpatentable over Stenman in view of Shim and Wall.

Appellants are appealing the Rejection of Claim 40 under 35 U.S.C. § 103(A), as being unpatentable over Stenman in view of Shim and Wall.

### VII. ARGUMENT

# (A) Stenman in view of Shim fails to teach or suggest all of the limitations of Claims 16, 19, 22, 26, 29, 32, and 36-38

# (I) Claims 16, 22, 26, 32, 36 and 38

Shim fails to teach storing and transmitting a group of remote control codes for a predetermined controlling operation to target equipment.

Appellants submit that the Examiner has failed to establish a *prima facie* case of obviousness with respect to Claims 16, 22, 26, 32, 36 and 38 pursuant to 35 U.S.C. § 103(a). To

establish a *prima facie* case of obviousness under § 103, the Examiner must show that the prior art references teach or suggest all of the claim limitations, there must be a reasonable expectation of success of the combination and there must be a motivation to combine the references. *In re Vaeck*, 947 F.2d 488 (Fed. Cir. 1991).

*Pro arguendo*, even if there is a motivation to combine Stenman and Shim, the hypothetical combination fails to teach or suggest each of the limitations recited in the independent claims for at least the following reasons.

Each of the independent claims include limitations directed to, in part, storing and transmitting (storage means or transmitting means) a group (first group) of remote control codes in response to a user operation when the mobile telephone is set in a second remote control mode.

The cited combination is deficient for at least two reasons: (1) Shim does not teach a group of control codes for one operation, and (2) Shim does not teach that the group of codes are transmitted to one target apparatus.

Shim teaches a method of controlling successive operations in at least **two remotely control devices by pressing one key**. See Shim Abstract. Shim was attempting to solve the problem with conventional remote controllers that required consecutive manipulation of two keys to control two appliances. Shim describes the prior art and solution with respect to an example of controlling a television set and a VCR, two distinct devices. The prior art requires two key manipulations where Shim requires only one.

Throughout the description in Shim, the reference clearly states that the transmission method is for controlling more than one device consecutively. The transmission of the code is transmitted to two devices. See Col. 3, lines 16-33, Col 4, lines 43-50. Figures 4a-e

illustrate the transmission of the codes in Shim. In each figure, the codes are being transmitted to two different devices.

In contrast, in the claimed invention, the plurality of codes is transmitted to a single target device. While the remote controller is capable of controlling multiple devices, the claims are directed to transmitting the codes to one device at a time.

Additionally, Shim does not teach a "group of control codes". Shim teaches a single code for controlling a single function. Figure 3 of Shim shows the transmitted data from the remote controller. The figure illustrates, for each control data, a pulse header, a custom code and a data code is transmitted (a set for each device). The custom code is for classifying products per manufacturing company, and the data code corresponds to the data for operating an actual receiver.

In the Advisory Action mailed on December 29, 2010, the Examiner asserts that the code can include one line, two lines or many lines of code. However, the reference does not describe the format for each code beyond what is illustrated in Figures 3 and 4a-e. Therefore, the reference does not support the Examiner's contention. The reference only suggests that one data code is stored and transmitted to a device. See Figures 3 and 4a-e.

If the key manipulated by the user is for supplying the plurality of data instructions, the consecutive plurality of data corresponding to the manipulated key are produced. Assuming that FIG. 4A show the data format for turning on the power of a VCR, the data format for selecting the television channel may be the same as those shown in FIG. 4B in view of the number of bits and format; otherwise, the arrangement of the custom code and data code are different but having the same number of bits as shown in FIG. 4C. Of course, as shown in FIG. 4D, the data format for the television-channel selection has the same format but different number of bits, while the number of bits and format are different, as shown in FIG. 4E.

See Col. 4, lines 16-29

Even if the codes were transmitted to the same device, the codes are directed to controlling two consecutive operations.

In contrast, the claimed invention is directed to having more than one data code or data instruction assigned to a button and grouped together and for performing **one controlling operation**. The groups of codes are stored in memory in advance. Each group of codes is associated in a one-to-one relationship with an operating function of the target equipment. When an operator selects the group, the remote controller sequentially transmits each of the remote control codes in the select group to the target equipment. Therefore, one button on the remote controller controls one function of the target equipment in the second operation mode, i.e., one group of codes controls one function. For example, as described in the specification, the group of codes can be used to program a VCR to record a television program. The transmission code group will include a time, channel, etc. The plurality of remote control codes which are the information for the recording of the television program define one transmission code group.

Accordingly, claims 16, 22, 26, 32, 36 and 38 are patentably distinct from the cited references at least based upon the above analysis.

### (II) Claims 19, 22, 29, 32, 37 and 38

Shim fails to teach storing part of remote control codes or transmitting part of remote control.

Each of Claims 19, 22, 29, 32, 37 and 38 is directed to, in part, storing a part of remote control codes of a group of remote control codes for a predetermined controlling operation and transmitting to the target equipment the group of remote control codes formed by a remote control code associated with an operation button pressed by a user in advance and the part of remote control codes to perform the predetermined control operation.

In the claimed invention, the user can add certain information to the stored part of remote control codes, such as the hour, day, minute and year, which will correspond to the hour, day, minute and year code prestored in the group. Shim does not teach storing parts of a remote control group in memory.

Shim describes a data output process for two cases: one in which the user manipulates keys which supply single data instructions only, and one in which the user manipulates a key for supplying a plurality of data instructions.

When the user manipulates the keys for supplying single data instructions, the remote controller IC 10 executes step S20 after determining that the key input exists in step S10 to buffer one output data instruction corresponding to the key signal received into the buffer within the remote controller IC 10. Since the key received by the user is a key for producing a single data instruction (S30), the single data instruction in the buffer (S20) is provided to the output (S50).....

When the user manipulates the key for supplying a plurality of data instructions, the remote controller IC 10 executes step S20 after determining that the key input exists in step S10 to buffer one output data instruction corresponding to the key signal received into the buffer within the remote controller IC 10. In step S30, it is determined that the key is one which provides plural data instructions, and in step S40, the plurality of data instructions are entered into the buffer.

Col. 3, lines 42-49; lines 53-60, emphasis added.

In either method of transmission, in Shim, the output is a single data instruction corresponding to the key manipulation or a plural data instruction corresponding to the key manipulation.

Neither transmission method describes forming a group of remote control codes, which are formed by a remote control code associated with an operation button pressed by a user and part of remote control codes in response to a user operation.

In Shim, a **complete code is stored in advance** and transmitted, whereas, in the claimed invention only part of the second group is stored in advance, the remaining part is generated by a key depression which is added or coupled to the part that is stored in advanced.

Once again, Stenman in view of Shim does not teach or suggest each and every element of Claims 19, 22, 29, 32, 37 and 38.

#### (III) Claims 22, 32, and 38

Shim fails to teach first, second and third remote control modes.

Each of Claims 22, 32 and 38 is directed to, in part, different types of transmission when the mobile telephone device is **set** in a different remote control mode.

For example, Claim 32 recites "transmitting to the target equipment a remote control code associated with one button of the plurality of operation buttons when the one button is pressed and when the mobile telephone is set in a first remote control mode; transmitting to the target equipment the first group of remote control codes in response to a user operation when the mobile telephone is set in a second remote control mode; and transmitting to the target equipment the second group of remote control codes formed by a remote control code associated with an operation button pressed by a user in advance and the part of remote control codes in response to a user operation when the mobile telephone is set in a third remote control mode."

Shim, at best, describes two transmission methods, not three. Shim also does not describe "setting" a remote control mode. The transmission methods in Shim are not modes that are set. In the claimed invention, the user can set the mobile telephone in any one of a first to third remote control method, in set mode. See Page 29. Shim describes the two cases of transmission without teaching how each case is determined. Clearly, Shim fails to teach the claimed transmission for each set remote control mode.

Based upon the above-identified reasons, Appellants submit that Claims 16, 19, 22, 26, 29, 32, 36, 37 and 38 are patentably distinct from Stenman and Shim. Accordingly, the rejection must be withdrawn.

# (B) <u>Stenman in view of Shim in view of August fails to teach or suggest all</u> of the limitations of Claim 17

Appellants submit that August fails to cure any of the deficiencies identified in argument section A(I) as set for above. Accordingly, Appellants submits that Claim 17 is patentably distinct from the cited references, whether taken alone or in any combination thereof, based at least upon the above-identified reasons.

# (C) <u>Stenman in view of Shim in view of Wall fails to teach or suggest all of</u> the limitations of Claims 18, 21, 25, 28, 31, and 35

Appellants submit that Wall fails to cure any of the deficiencies identified in argument section A(I)-A(III) as set for above. Accordingly, Appellants submits that Claims 18, 21, 25, 28, 31, and 35 are patentably distinct from the cited references, whether taken alone or in any combination thereof, based at least upon the above-identified reasons.

# (D) Stenman in view of Shim in view of August fails to teach or suggest all of the limitations of Claims 20, 23, 24, 27, 30, 33, and 34

Appellants submit that August fails to cure any of the deficiencies identified in argument section A(I)-A(III) as set for above. Accordingly, Appellants submits that Claims 20, 23, 24, 27, 30, 33, and 34 are patentably distinct from the cited references, whether taken alone or in any combination thereof, based at least upon the above-identified reasons.

(E) Stenman in view of Shim in view of Wall fails to teach or suggest all of

the limitations of Claims 39 and 40

Appellants submit that Wall fails to cure any of the deficiencies identified in

argument section A(I)-A(III) as set for above. Accordingly, Appellants submits that Claims 39

and 40 are patentably distinct from the cited references, whether taken alone or in any

combination thereof, based at least upon the above-identified reasons.

**(F)** Conclusion

Based on the above arguments and remarks, Appellants respectfully submit that

the claims of the instant invention on appeal are not anticipated or obvious in light of Stenman,

Shim, Wall, or August, either individually or in combination. Consequently, the rejections of the

claims based on such references are in error. In view of the remarks submitted hereinabove, the

references applied against Claims 16-40 on appeal do not render those claims unpatentable under

35 U.S.C. § 103 (a). Thus, Appellants submit that the §103 rejections are in error and must be

reversed. The Commissioner is hereby authorized to charge any additional fees or credit any

overpayment in connection herewith to Deposit Account No. 19-1013/SSMP.

Respectfully submitted,

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### VIII. CLAIMS APPENDIX

1. (Cancelled) A mobile telephone with remote-controlling capability which remote-controls target equipment by transmitting to the target equipment a desired code in various remote control codes for predetermined various controlling operations on the target equipment, comprising:
an operation unit having a plurality of operation buttons;

storage means for storing the various remote control codes associated with the plurality of operation buttons in a one-to-one relationship; and

transmission means for transmitting to the target equipment a remote control code, which is associated with one button of the plurality of operation buttons, and is one of the various remote control codes stored in said storage means when the one button is pressed.

2. (Cancelled) The mobile telephone with remote-controlling capability according to claim 1, further comprising:

display means for displaying correspondences between the plurality of operation buttons and the predetermined various controlling operations performed when the plurality of operation buttons are pressed respectively.

3. (Cancelled) The mobile telephone with remote-controlling capability according to claim 2, wherein

said display means displays the correspondences by displaying an image of the operation unit showing controlling operations on and corresponding to the plurality of operation buttons.

4. (Cancelled) The mobile telephone with remote-controlling capability according to claim 1, further comprising

download means for downloading the various remote control codes associated with the plurality of operation buttons in a one-to-one relationship from a server, which is connected to a communications network, and has the various remote control codes associated with the plurality of operation buttons in a one-to-one relationship, through the communications network, and storing the various remote control codes in said storage means.

5. (Cancelled) A remote-controlling method for a mobile telephone with remote-controlling capability which remote-controls target equipment by transmitting to the target equipment a desired code in various remote control codes for predetermined various controlling operations on the target equipment, and has an operation unit and storage means for storing the various remote control codes associated with a plurality of operation buttons of the operation unit in a one-to-one relationship comprising:

a transmitting step of transmitting to the target equipment a remote control code, which is associated with one button of the plurality of operation buttons, and is one of the various remote control codes stored in the storage means, when the one button is pressed.

6. (Cancelled) The remote-controlling method according to claim 5, further comprising a displaying step of displaying correspondences between the plurality of operation buttons and the predetermined various controlling operations performed when the plurality of operation buttons are pressed respectively. 7. (Cancelled) The remote-controlling method according to claim 6, wherein

said displaying step displays the correspondences by displaying an image of the operation unit showing controlling operations on and corresponding to the plurality of operation buttons.

8. (Cancelled) The remote-controlling method according to claim 5, further comprising

a downloading step of downloading the various remote control codes associated with the plurality of operation buttons in a one-to-one relationship from a server, which is connected to a communications network, and has the various remote control codes associated with the plurality of operation buttons in a one-to-one relationship, through the communications network, and storing the various remote control codes in said storage means.

9. (Cancelled) A program used to direct a computer to execute a remote-controlling method for a mobile telephone with remote-controlling capability which remote-controls target equipment by transmitting to the target equipment a desired code in various remote control codes for predetermined various controlling operations on the target equipment, and said mobile telephone has an operation unit and storage means for storing the various remote control codes associated with a plurality of operation buttons of the operation unit in a one-to-one relationship, said method comprising:

a transmitting step of transmitting to the target equipment a remote control code, which is associated with one button of the plurality of operation buttons, and is one of the various remote control codes stored in the storage means, when the one button is pressed.

- 10. (Cancelled) The program according to claim 9, wherein said method further comprising: a displaying step of displaying correspondences between the plurality of operation buttons and the predetermined various controlling operations performed when the plurality of operation buttons are pressed respectively.
- 11. (Cancelled) The program according to claim 10, wherein said displaying step displays the correspondences by displaying an image of the operation unit showing controlling operations on and corresponding to the plurality of operation buttons.
- 12. (Cancelled) The program according to claim 9, wherein said method further comprising:

  a downloading step of downloading the various remote control codes associated with the plurality of operation buttons in a one-to-one relationship from a server, which is connected to a communications network, and has the various remote control codes associated with the plurality of operation buttons in a one-to-one relationship, through the communications network, and storing the various remote control codes in said storage means.

## 13. (Cancelled) A remote control system, comprising:

a mobile telephone with remote-controlling capability which has an operation unit provided with a plurality of operation buttons and remote-controls target equipment; and a server which is connected to a communications network, and associates various remote control codes for predetermined various controlling operations on the target equipment with the plurality of operation buttons in a one-to-one relationship and holds the codes, wherein:

said mobile telephone comprises:

storage means;

download means for downloading the various remote control codes associated with the plurality of operation buttons in a one-to-one relationship from said server through the communications network, and storing the codes in said storage means; and

transmission means for transmitting to the target equipment a remote control code, which is associated with one button of the plurality of operation buttons and is one of the various remote control codes stored in said storage means when the one button is pressed.

- 14. (Cancelled) The remote control system according to claim 13, wherein said mobile telephone comprises display means for displaying correspondences between the plurality of operation buttons and the predetermined various controlling operations performed when the plurality of operation buttons are pressed respectively.
- 15. (Cancelled) The remote control system according to claim 14, wherein said display means displays the correspondences by displaying an image of the operation unit showing controlling operations on and corresponding to the plurality of operation buttons.
- 16. (Rejected) A mobile telephone with remote-controlling capability which remote-controls target equipment, comprising:

storage means for storing a group of remote control codes for only one predetermined controlling operation to be performed on the target equipment; and

transmission means for transmitting to the target equipment the group of remote control codes as a batch for the only one predetermined controlling operation to be performed on the target equipment in response to a user operation.

17. (Rejected) The mobile telephone with remote-controlling capability according to claim 16, wherein the target equipment is a video recording device, and the group of remote control codes forms recording information for recording of a program.

18. (Rejected) The mobile telephone with remote-controlling capability according to claim 16, further comprising

download means for downloading the group of remote control codes from a server, which is connected to a communications network and holds the group of remote control codes, through the communications network, and storing the group of remote control codes in said storage means.

19. (Rejected) A mobile telephone with remote-controlling capability which remote-controls target equipment, comprising:

an operation unit having a plurality of operation buttons;

storage means for storing various remote control codes associated with the plurality of operation buttons in a one-to-one relationship for various controlling operations on the target equipment, and a part of remote control codes of a group of remote control codes for only one predetermined controlling operation on the target equipment;

a code definition unit including a number of codes showing at least whether the remote control codes are predetermined and fixed or variable and assigned by a user; and

transmission means for transmitting to the target equipment the group of remote control codes as a batch for only one predetermined controlling operation, formed by a remote control code associated with an operation button pressed by the user in advance and the part of remote control codes to perform the only one predetermined controlling operation on the target equipment in response to a user operation.

- 20. (Rejected) The mobile telephone with remote-controlling capability according to claim 19, wherein the group of remote control codes forms time setting information for setting a time on the target equipment.
- 21. (Rejected) The mobile telephone with remote-controlling capability according to claim 19, further comprising

download means for downloading the various remote control codes and the part of remote control codes from a server, which is connected to a communications network and holds the various remote control codes and the part of remote control codes, through the communications network, and storing the various remote control codes and the part of remote control codes in said storage means.

22. (Rejected) A mobile telephone with remote-controlling capability which remote-controls target equipment, comprising:

an operation unit having a plurality of operation buttons;

storage means for storing various remote control codes associated with the plurality of operation buttons in a one-to-one relationship for various controlling operations on the target equipment, a first group of remote control codes for only one predetermined first controlling operation on the target equipment, and a part of remote control codes of a second group of remote control codes for only one predetermined second controlling operation on the target equipment;

a code definition unit including number of codes showing at least whether the remote control codes are predetermined and fixed or variable and assigned by a user; and

transmission means for transmitting to the target equipment a remote control code associated with one button of the plurality of operation buttons when the one button is pressed and when the mobile telephone is set in a first remote control mode, transmitting to the target equipment the first group of remote control codes as a first batch in response to a user operation when the mobile telephone is set in a second remote control mode, and transmitting to the target equipment the second group of remote control codes as a second batch formed by a remote control code associated with an operation button pressed by the user in advance and the part of remote control codes in response to a user operation when the mobile telephone is set in third remote control mode.

23. (Rejected) The mobile telephone with remote-controlling capability according to claim 22, wherein

the target equipment is a video recording device, and the first group of remote control codes form recording information for recording of a program.

24. (Rejected) The mobile telephone with remote-controlling capability according to claim 22, wherein

the second group of remote control codes forms time setting information for setting a time on the target equipment.

25. (Rejected) The mobile telephone with remote-controlling capability according to claim 22, wherein

each remote control code stored in said storage means is received from a server connected to a communications network through the communications network.

26. (Rejected) A remote-controlling method for a mobile telephone with remote-controlling capability which remote-controls target equipment, and has storage means for storing a group of remote control codes for only one predetermined controlling operation on the target equipment, comprising

a transmitting step of transmitting to the target equipment the group of remote control codes as a batch for only one predetermined controlling operation stored in the storage means in response to a user operation.

27. (Rejected) The remote-controlling method according to claim 26, wherein

the target equipment is a video recording device, and the group of remote control codes forms recording information for recording of a program.

28. (Rejected) The remote-controlling method according to claim 26, further comprising a step of downloading the group of remote control codes from a server, which is connected to a communications network and holds the group of remote control codes, through the communications network, and storing the group of remote control codes in said storage means.

29. (Rejected) A remote-controlling method for a mobile telephone with remote-controlling capability which remote-controls target equipment, and has an operation unit and storage means for storing various remote control codes associated with a plurality of operation buttons of the operation unit in a one-to-one relationship for various controlling operations on the target equipment, and a part of remote control codes of a group of remote control codes for only one predetermined controlling operation on the target equipment, comprising:

a step of determining whether the remote control codes are predetermined and fixed or variable and assigned by a user according to number of codes in a code definition unit;

a step of transmitting to the target equipment the group of remote control codes as a batch for only one predetermined controlling operation, formed by the part of remote control codes stored in the storage means and a remote control code associated with an operation button pressed by the user in advance to perform the only one predetermined controlling operation on the target equipment in response to a user operation.

30. (Rejected) The remote-controlling method according to claim 29, wherein

the group of remote control codes forms time setting information for setting a time on the target equipment.

31. (Rejected) The remote-controlling method according to claim 29, further comprising a step of downloading the various remote control codes and the part of remote control codes from a server, which is connected to a communications network and holds the various remote control codes and the part of remote control codes, through the communications network, and storing the various remote control codes and the part of remote control codes in the storage means.

32. (Rejected) A remote-controlling method for a mobile telephone with remote-controlling capability which remote-controls target equipment, and has an operation unit and storage means for storing various remote control codes associated with a plurality of operation buttons of the operation unit in a one-to-one relationship for various controlling operations on the target equipment, a first group of remote control codes for only one predetermined first controlling operation on the target equipment, and a part of remote control codes of a second group of remote control codes for only one predetermined second controlling operation on the target equipment, comprising the steps of:

transmitting to the target equipment a remote control code associated with one button of the plurality of operation buttons when the one button is pressed and when the mobile telephone is set in a first remote control mode;

transmitting to the target equipment the first group of remote control codes as a first batch for only one predetermined first controlling operation in response to a user operation when the mobile telephone is set in a second remote control mode;

determining whether the remote control codes are predetermined and fixed or variable and assigned by the user according to number of codes in a code definition unit when the mobile telephone is set in a third remote control mode; and

transmitting to the target equipment the second group of remote control codes as a second batch for only one predetermined second controlling operation, formed by a remote control code associated with an operation button pressed by a user in advance and the part of remote control codes for only one predetermined second controlling operation in response to a user operation when the mobile telephone is set in the third remote control mode.

- 33. (Rejected) The remote-controlling method according to claim 32, wherein the target equipment is a video recording device, and the first group of remote control codes forms recording information for recording of a program.
- 34. (Rejected) The remote-controlling method according to claim 32, wherein the second group of remote control codes forms time setting information for setting a time on the target equipment.
- 35. (Rejected) The remote-controlling method according to claim 32, wherein each remote control code stored in said storage means is received from a server connected to a communications network through the communications network.
- 36. (Rejected) A program used to direct a computer to execute a remote-controlling method for a mobile telephone with remote-controlling capability which remote-controls target equipment,

and said mobile telephone has storage means for storing a group of remote control codes for only one predetermined controlling operation on the target equipment, said remote-controlling method comprising:

a transmitting step of transmitting to the target equipment the group of remote control codes as a batch for only one predetermined controlling operation stored in the storage means in response to a user operation.

37. (Rejected) A program used to direct a computer to execute a remote-controlling method for a mobile telephone with remote-controlling capability which remote-controls target equipment, and said mobile telephone has an operation unit and storage means for storing various remote control codes associated with a plurality of operation buttons of the operation unit in a one-to-one relationship for various controlling operations on the target equipment, and a part of remote control codes of a group of remote control codes for only one predetermined controlling operation on the target equipment, said remote-controlling method comprising: determining whether the remote control codes are predetermined and fixed or variable and assigned by a user according to number of codes in a code definition unit; a step of transmitting to the target equipment the group of remote control codes as a batch for only one predetermined controlling operation, formed by the part of remote control codes stored in the storage means and remote control code associated with an operation button pressed by the user in advance to perform the only one predetermined controlling operation on the target equipment in response to a user operation.

38. (Rejected) A program used to direct a computer to execute a remote-controlling method for a mobile telephone with remote-controlling capability which remote-controls target equipment, and said mobile telephone has an operation unit and storage means for storing various remote control codes associated with a plurality of operation buttons of the operation unit in a one-to-one relationship for various controlling operations on the target equipment, a first group of remote control codes for only one predetermined first controlling operation on the target equipment, and a part of remote control codes of a second group of remote control codes for only one predetermined second controlling operation on the target equipment, said remote-controlling method comprising the steps of:

transmitting to the target equipment a remote control code associated with one button of the plurality of operation buttons when the one button is pressed and when the mobile telephone is set in a first remote control mode;

transmitting to the target equipment the first group of remote control codes as a first

batch for only one predetermined first controlling operation in response to a user operation when the mobile telephone is set in a second remote control mode; determining whether the remote control codes are predetermined and fixed or variable and assigned by the user according to number of codes in a code definition unit when the mobile telephone is set in a third remote control mode; and transmitting to the target equipment the second group of remote control codes as a second batch for only one predetermined second controlling operation, formed by a remote control code associated with an operation button pressed by a user in advance and the part of remote control codes in response to a user operation when the mobile telephone is set in the third remote control

mode.

39. (Rejected) A remote control system, comprising:

a mobile telephone with remote-controlling capability which has an operation unit provided with a plurality of operation buttons, and remote-controls target equipment; and

a server which is connected to a communications network, and stores various remote control codes associated with the plurality of operation buttons in a one-to-one relationship for various controlling operations on the target equipment, a first group of remote control codes for only one predetermined first controlling operation on the target equipment, and a part of remote control codes of a second group of remote control codes for only one predetermined second controlling operation on the target equipment, wherein

said mobile telephone comprises:

storage means;

download means for downloading the various remote control codes, the first group of remote control codes, and the part of remote control codes from said server through the communications network, and storing the downloaded codes in said storage means; and

transmission means for transmitting to the target equipment a remote control code associated with one button of the plurality of operation buttons when the one button is pressed and when the mobile telephone is set in a first remote control mode, transmitting to the target equipment the first group of remote control codes as a first batch for only one predetermined first controlling operation in response to a user operation when the mobile telephone is set in a second remote control mode, and transmitting to the target equipment the second group of remote control codes as a second batch for only one predetermined second controlling operation formed by a remote control code associated with an operation button pressed by a user in advance and

the part of remote control codes in response to a user operation when the mobile telephone is set in a third remote control mode.

40. (Rejected) The remote control system of claim 39, wherein said various remote control codes associated with said plurality of operation buttons depending on remote control mode can be used to control different operations.

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Χ.	RELATE	D PROCEEDINGS	APPENDIX

None